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EPA Region 5 Records Ctr.



379537

Via Express Mail

April 8, 2002

Mr. Kevin Adler, Remedial Project Manager  
U.S. Environmental Protection Agency, Region 5  
Office of Superfund, Remedial & Enforcement Response Branch  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

*K.A.*  
*4/11/02*  
*see notes*

**Subject: Granville Solvents Site Removal Action Quarterly Progress Report – First Quarter 2002**

Dear Mr. Adler:

I have enclosed two copies of the First Quarter 2002 Report for the Removal Action at the Granville Solvents Site on behalf of the Granville Solvents Site PRP Group. Copies have been sent to the following individuals:

1. Mr. Steve Acree, U.S. EPA
2. Mr. Fred Myers, Ohio EPA
3. Mr. Joe Hickman, Manager, Village of Granville

If you have any questions regarding this report, please contact me at (919) 668-3218.

Regards,

William S. Brewer, Ph.D.  
Granville Technical Committee Chair

cc: Peter Felitti, Regional Counsel, US EPA  
Ben Pfefferle, Chairman, GSS PRP Group  
Granville Technical Committee  
G. Myers, Metcalf & Eddy  
T. Struttman, Sharp & Associates

**GRANVILLE SOLVENTS SITE  
REMOVAL ACTION QUARTERLY REPORT  
FOR JANUARY, FEBRUARY and MARCH, 2002**

**April 2002**

Pursuant to the requirement set forth in the Administrative Order by Consent (AOC, September 7, 1994) between the U.S. EPA and the Granville Solvents Site (GSS) Potentially Responsible Parties (PRP) Group, in Section 2.5 – Reporting, and in a letter dated November 14, 1996, from Ms. Diane Spencer (U.S. EPA), this report constitutes the quarterly written progress report concerning actions undertaken pursuant to the AOC.

**I. PROGRESS MADE DURING REPORTING PERIOD**

Source Area Groundwater Control

The groundwater pumping and treatment system operated 738 hours in January, 648 hours in February, and 744 hours in March, for a total of 2,130 hours (98.61% of the total hours available) during the first quarter of 2002. Since operation of the treatment system began in December 1994, the system has been operating over 98.7% of the available time.

During the first quarter of 2002, the treatment system processed approximately 11.2 million gallons of water in January, 8.9 million gallons of water in February, and 11.4 million gallons of water in March for a total of 31.50 million gallons of water for the quarter. Since operation began in December 1994, the system has processed more than 864.1 million gallons of water.

During the first quarter of 2002, Metcalf & Eddy collected monthly air pressure measurements in the air-stripping unit's inlet and exhaust ducts. These data were used to calculate airflow values. Following acid washing in January, airflow increased from 1,835 cubic feet per minute (cfm) to 1,993 cfm. The airflow rate during the month of January averaged 1943 cfm, 1993 cfm in February, and 1874 cfm in March.

*What is  
acid wash  
schedule?*

M&E continued to perform scheduled monthly maintenance on the treatment system. This maintenance ensures that the system is performing at maximum efficiency and decreases unscheduled downtime. Maintenance included replacing bag filters, lubricating the transfer pump and blower motors, and maintaining the flow meters and level sensors.

Water samples were collected from the system's influent and effluent sampling ports on January 16, February 13, and March 13, 2002. Analytical results are listed in Table 1.

**TABLE 1**

VOCs	Influent Jan. 16	Effluent Jan. 16	Influent Feb. 13	Effluent Feb. 13	Influent March 13	Effluent March 13
1,1,1-trichloroethane	14.5 µg/l	ND	15.0 µg/l	ND	14.7 µg/l	ND
Cis-1,2-dichloroethene	3.5 µg/l	ND	3.4 µg/l	ND	3.4 µg/l	ND
Tetrachloroethene	19.5 µg/l	ND	20.0 µg/l	ND	18.1 µg/l	ND
Trichloroethene	19.4 µg/l	ND	20.5 µg/l	ND	17.3 µg/l	ND
1,1-dichloroethylene	ND	ND	ND	ND	ND	ND

Extraction well GSS-EW1 was operated at an average flow rate of approximately 127 gallons per minute (gpm) during the first quarter of 2002, whereas GSS-EW2 was operated at an average flow rate of approximately 125 gallons per minute (gpm) during the period. The total pumping rate from the two wells averaged 252 gpm for the first quarter of 2002 - 252 gpm for the month of January, 228 gpm for the month of February, and 255 gpm for the month of December.

The data in Table 1 represent groundwater treatment influent and effluent concentrations measured during the first quarter of 2002. Metcalf & Eddy has recorded that approximately 31.5 million gallons of water were processed for the first quarter of 2002. Based on these data, approximately 0.22 lb/day in January, 0.18 lb/day in February and 0.21 lb/day in March of total VOCs were discharged to the atmosphere during the reporting period.

#### Groundwater Monitoring Plan

Groundwater level measurements were collected on January 16, February 13, and March 13, 2002. These data were used to develop potentiometric surface maps.

> Can we  
see these  
in Q reports?

#### Source Area Soils

Sharp and Associates, Inc. (SHARP) continued operation of the air injection/air sparging/ and soil vapor extraction (AI/AS/SVE) system during the first quarter 2002.

The treatment system was tested and started up on September 9, 2001. The air injection and soil vapor extraction components were brought on line in late September. The air sparging component of the system was started up during October 2001 after the whole air sample confirmed that operation was below the de minimus air discharge of 10 lb/day.

A whole air sample was collected January 11. Analysis of the sample are listed below in Table 2:

TABLE 2

Volatile Compound	Air Sample 1/11/02
1,1-Dichloroethane	ND
cis-1,2-Dichloroethene	94
1,1,1,-Trichloroethane	1,000
Trichloroethene	2,100
Tetrachloroethene	17,000

All concentrations are in  $\mu\text{g}/\text{m}^3$  analyzed by EPA method TO-14 by Severn Trent Laboratories in Knoxville, TN.

System maintenance followed procedures outlined in the Removal Action Operations and Maintenance Manual (SHARP, October 26, 2001). To date, approximately 173 pounds of total VOCs have been removed with the SVE/AS/AI system. The removal rate has been maintained below the de minimus value of 10 lb/day. On November 13, 2001, Sharp began cycling the SVE wells to change the vapor stagnation points between vapor extraction wells and increase overall mass removal.

need  
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#### Active or Completed Tasks

The following specific tasks were completed during the reporting period:

- Collected water samples on January 16, February 13 and March 13, 2002 from the groundwater treatment system influent and effluent sampling ports.
- Collected water level measurements on January 16, February 13 and March 13, 2002.
- Collected groundwater treatment system airflow data on a monthly basis.
- Collected the quarterly suite of samples from the monitoring well network on February 27, 2002.
- Operated the SVE/AI/AS system per the plan.
- Collected air samples from SVE/AI/AS system on March 7, 2002. Analytical results are not yet available, but will be included in the next quarterly report.

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## II. DELIVERABLES (CURRENT PERIOD AND NEXT PERIOD)

### Current Period:

Deliverable  
Quarterly Report

Due Date  
April 5, 2002

Delivered  
April 5, 2002

### Next Period:

Deliverable  
Quarterly Report

Due Date  
July 5, 2002

## III. DIFFICULTIES ENCOUNTERED & RESPONSE ACTIONS TAKEN THIS PERIOD

Malfunction of the transfer pump motor in the groundwater treatment system occurred on February 4, 2002. A replacement pump was installed the following day and normal operations were resumed.

## IV. ANTICIPATED ACTIVITIES DURING NEXT REPORTING PERIOD

During the next reporting period, the following tasks will be performed:

- Collect potentiometric surface data on a monthly basis.
- Sample the groundwater treatment system influent and effluent water on a monthly basis.
- Perform scheduled maintenance of the groundwater treatment system
- Collect the annual suite of samples from the groundwater monitoring network. *> when deliv. data? rpt.*
- Continued operation, maintenance, and monitoring of the SVE, AS, and AI systems.

*When ~~at~~ monit. network  
sample data avail?*